2-module actuator control with neutral

Description

This device, fitted in the front with 4 buttons and 4 two-color LEDs is equipped with 2 independent relays to handle:
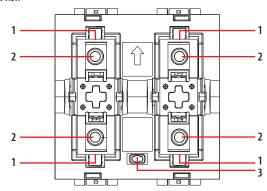
- 2 loads or 2 groups of independent loads;

- 1 single load (motor for shutters).

The actuator can also be configured to simultaneously handle the load connected to it and to act as a "control device" to manage one or more remote actuators, with typical operating modes of the 2-module base control. More specifically, after the configuration, it is possible to set the following modes of operation:
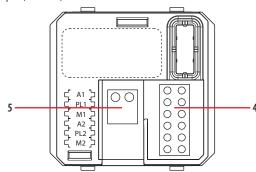
1. Actuator for single load (lighting or shutter automation) with local control.

2. Actuator for 2 independent loads (lighting) with 2 local controls.

3. Actuator for 1 load (lighting) with local control by the left button and remote actuator or scenario control by the right button.

4. Actuator for 1 load (shutter automation) with local control by the left button and remote actuator or scenario control by the right button.

The device consists of two separable parts: one part of contacts and one of control, in this way it is possible to wire them separately.
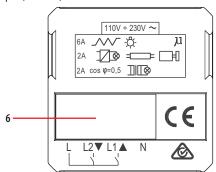
Front view

Control part (back view)

Contact part (back view)

Legend

1. LED:
   LIVING LIGHT: green with motor stop or orange (green + red) with motor in operation green with light OFF and orange with light ON;
   AXOLUTE: blue with motor stop or blue + red with motor in operation blue with light OFF or blue + red with light ON-

2. Buttons.

3. LED control/off button.

4. Configurator seat (note that this must only be used in MyHOME systems with the physical configuration).

5. BUS.

6. Terminals (3 x 2.5 mm2) connection to the load.

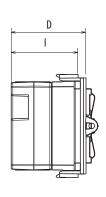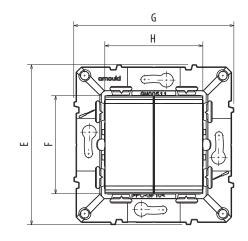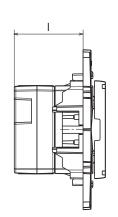# 2-module actuator control with neutral

Dimensional data

Overall size: 2 flush-mounted modules

Installation type	Item	A	B	C	D	E	F	G	H	I (surface-mouted)
Livinh-Light		47	43,8	43,8	34,1	-	-	-	-	30,5
Living-Light AIR	LN4672M2	47	43,8	43,8	34,1	-	-	-	-	36,25
Living-Light AIR Europa		47	43,8	43,8	34,1	-	-	-	-	34,25
Axolute		-	45	45	35	-	-	-	-	32
Axolute ETERIS	H4672M2	-	45	45	35	-	-	-	-	38
Axolute AIR		-	45	45	35	-	-	-	-	37
Matix	AM5852M2	47	43,6	47,1	34,1	-	-	-	-	33
Arteor		-	45	45	34,5	-	-	-	-	33
Celiane	067561	-	45	45	34,5	-	-	-	-	32
Espace Evolution	64195 - 64196	-	-	-	-	73	44,7	73	44,7	31,25
Espace Evolution	64393					73	45	73	45	31,25

Technical data

Control part:
Power supply: 18 – 27 Vdc
Absorptions (maximum led intensity): 7 mA (stand-by)
16 mA max (rolling shutter or a light)
24 mA max (two lights)
Operating temperature: 0 – 40 ℃
Storage temperature: (-5) – (+45) ℃

Contact part:
Main voltage: 110 – 230 Vac; 50 – 60 Hz

		Incandescent lamps Halogen lamps		Motor reducers for rolling shutters		LED lamps Compact fluorescent lamps	
A *	230 Vac	1380 W	6 A	460 W	2 A	250 W	1 A
	110 Vac	660 W	6 A	250 W	2 A	110 W	1 A
B *	230 Vac	460 W	2 A	460 W	2 A	–	–
	110 Vac	220 W	2 A	250 W	2 A	–	–

		Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers	
A *	230 Vac	460 W	2 A	460 VA	2 A cosφ 0,5
	110 Vac	220 W	2 A	220 VA	2 A cosφ 0,5
B *	230 Vac	–	–	460 VA	2 A cosφ 0,5
	110 Vac	–	–	220 VA	2 A cosφ 0,5

A * To use with connected neutral.
B * To use without neutral (see paragraph 6).
(**) Or 10 maxi. lamps. For good lighting comfort, we recommend the use of lamps of
the same type and from the same supplier.

Configuration

If the device is installed in a MyHOME system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MyHOME_Suite software package, downloadable from the website www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
With the virtual configuration, the functions performed by the front buttons are independent from the local actuator functions.

The software allows to configure 4 independent addresses: 2 for the actuators and 2 for front controls.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MyHOME_Suite software package.

Note: For this device, the MyHOME Server automatically configures 2 channels.

Function selection

1. Lighting Actuator Mode (1 load) or shutter automation with local control

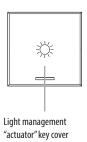Configure A1, M1 and PL1 to define the local actuator address and mode.

1.1 Addressing

Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Apartment	Room	0 – 10	A1=1 – 9
	Lighting point	0 – 15	PL1=1 – 9

To configure the group address (1-10) from 0 to 255 use the MyHOME_Suite virtual configuration.

1.2 Lighting

Virtual configuration (MyHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator - cyclic ON/OFF	Master	M1= 0	
ON with top button, OFF with bottom button	-	M1= 0/I	
Actuator as Slave. Receives a control sent by a Master actuator which has the same address	Slave		
Master Actuator - cyclic ON/OFF ignores Room and General controls	Master PUL Delay OFF = 0	M1= PUL	
Master Actuator with OFF control delayed on the corresponding Slave actuator.[1]	Master PUL Delay OFF = 1 – 255	M1= 1	1 minute
		M1= 2	2 minutes
		M1= 3	3 minutes
		M1= 4	4 minutes

Light management "actuator" key cover

To define the type of load (lamp, solenoid valve etc.) use the MyHOME_Suite virtual configuration.
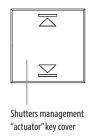
NOTE: only for point-to-point control. With the OFF control the Master actuator is disabled, the Slave actuator is disabled after the time set in the Master actuator has elapsed. A function commonly used in windowless bathrooms, where the ON control simultaneously switches on the light (Master actuator) and the ventilation fan (Slave actuator). The following OFF control immediately switches off the light and keeps the fan on for the period of time set by the configurator 1÷4 inserted in M of the Master actuator as shown in the table.

Configuration

1.3 Automation

Virtual configuration (MyHOME_Suite)		Physical configuration		
Function	**Parameter / setting**			
Shutter UP/DOWN with STOP after 2 minutes. The actuator ignores Room and General controls	Master PUL	M1= OFF		
Shutter UP/DOWN with STOP after the defined time	Master, Slave	M1= 5	1 minute	
		M1= 6	2 minutes	
		M1= 7	5 minutes	
		M1= 8	infinite	
UP/DOWN monostable	-	M1= ↑↓M		
UP/DOWN bistable	-	M1=↑↓		

Shutters management "actuator" key cover

To use "Actuator as Slave with PUL function", the "Load type" (Actuator, Blinds, Curtains, Gate, Garage door) and define the STOP time 1 – 60 sec. use the MyHOME_Suite virtual configuration.

2. Lighting Actuator Mode (2 separate loads) with local controls

In this mode, the actuator manages two separate loads, connected to the contacts C – L1 and C – L2 of the two relays, locally controlled with both front buttons, right (load connected in C – L2) and left (load connected in C – L1).
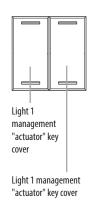
2.1 Addressing

Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Apartment	Room	0 – 10	A1, A2= 1 – 9
	Lighting point	0 – 15	PL1, PL2= 1 – 9

To configure the group address (1-10) from 0 to 255 use the MyHOME_Suite virtual configuration.

2.2 Lighting

Virtual configuration (MyHOME_Suite)		Physical configuration		
Function	**Parameter / setting**			
Master Actuator - cyclic ON/OFF	Master	M2= 0	M1= CEN	
ON with top button, OFF with bottom button	-	M2= 0/I	M1= CEN	
Actuator as Slave. Receives a control sent by a Master actuator which has the same address	Slave	M2= SLA	M1= CEN	
Master Actuator - cyclic ON/OFF ignores Room and General controls	Master PUL Delay OFF = 0	M2= PUL	M1= CEN	
Master Actuator with OFF control delayed on the corresponding Slave actuator.[1]	Master PUL Delay OFF = 1 – 255	M2= 1	M1= CEN	1 minute
		M2= 2	M1= CEN	2 minutes
		M2= 3	M1= CEN	3 minutes
		M2= 4	M1= CEN	4 minutes

Light 1 management "actuator" key cover

Light 1 management "actuator" key cover

To define the type of load (lamp, solenoid valve etc.) use the MyHOME_Suite virtual configuration.

NOTE: only for point-to-point control. With the OFF control the Master actuator is disabled, the Slave actuator is disabled after the time set in the Master actuator has elapsed. A function commonly used in windowless bathrooms, where the ON control simultaneously switches on the light (Master actuator) and the ventilation fan (Slave actuator). The fo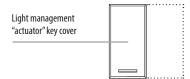llowing OFF control immediately switches off the light and keeps the fan on for the period of time set by the configurator 1 – 4 inserted in M of the Master actuator as shown in the table.

Configuration

3. Actuator for 1 load (lighting) with local control by the left button and remote actuator or scenario control by the right button

3.1 Addressing

Configure A1, M1 and PL1 to define the local actuator address and mode of operation (controlled by the left button) as specified in paragraphs 1.1 and 1.2.
Configure A2 PL2 to define the address of the remote actuator to be managed, according to the following table:

Light management
"actuator" key cover

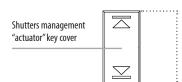| Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Point-to-point	Room	0 – 10	A2= 1 – 9
	Lighting point	0 – 15	PL2= 1 – 9
Room		0 – 10	A2= AMB, PL2= 1 – 9
Group		1 – 255	A2= GR, PL2= 1 – 9
General		General	A2= GEN

3.2 Mode of operation of the remote control

See chapter 5

4. Actuator for 1 load (shutters automation) with local control by the left button and remote actuator or scenario control by the right button

4.1 Addressing

Configure A1, M1 and PL1 to define the local actuator address and mode of operation (controlled by the left button) as specified in paragraphs 1.1 and 1.3.
Configure A2 PL2 to define the address of the remote actuator to be managed, according to the following table:

Shutters management
"actuator" key cover

Address type		Virtual configuration (MyHOME_Suite)	Physical configuration
Point-to-point	Room	0 – 10	A2= 1 – 9
	Lighting point	0 – 15	PL2= 1 – 9
Room		0 – 10	A2= AMB, PL2= 1 – 9
Group		1 – 255	A2= GR, PL2= 1 – 9
General		General	A2= GEN

To configure the Environment and light point reference addresses of an actuator use a MyHOME_Suite virtual configuration.

4.2 Mode of operation of the remote control
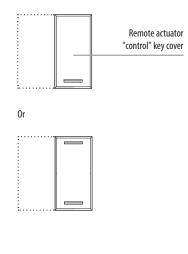
See chapter 5

Configuration

5. Mode of operation of the control by the right button

5.1 ON/OFF control

Virtual configuration (MyHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Cyclic.		M2= 0
ON		M2= ON
OFF		M2= OFF
Button		M2= PUL
Timed ON	0.5 sec	M2= 8
	30 sec	M2= 7
	1 min	M2= 1
	2 min	M2= 2
	3 min	M2= 3
	4 min	M2= 4
	5 min	M2= 5
	15 min	M2= 6

Remote actuator "control" key cover

Or

5.1.1 ON/OFF Control and ADJUSTMENT (Point-to-Point only):
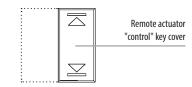
Virtual configuration (MyHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT. ON/OFF when pressing briefly and adjustment when holding down.	M2= 0
ON with top button, OFF with bottom button and DIMMER when held down	M2= 0/I

For the "ON/OFF with adjustment" function, "Timed ON" with parameter 2sec, 10min, 15min, "Blinking", "Cyclic with custom point-to-point adjustment", "ON/OFF with custom point-to-point adjustment", "Cyclic with custom adjustment" and "Custom cyclic dimmer with no adjustment" use virtual configuration via MyHOME_Suite.

5.2 Automation

Virtual configuration (MyHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control	M2=↑↓
Monostable control	M2=↑↓M

Remote actuator "control" key cover

For bistable command + reed control use the virtual MyHOME_Suite configuration

Configuration

5.3 Programmed scenario activation

5.3.1 Addressing

		Virtual configuration (MyHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	A2=1-9
	Lighting point	0-15	PL2=1-9

Key cover
scenario activation

5.3.2 Mode

	Virtual configuration (MyHOME_Suite)	Physical configuration
Upper pushbutton	0-31	M2=CEN
Lower pushbutton	0-31	M2=CEN

The scenarios can be called only by the right button. If the device is configured in PHYSICAL CONFIGURATION, the scenarios called will be 1 and 2.

5.4 Plus programmed scenario activation

To configure the number 1 - 2047 of the scenario and of the buttons 0 - 31 on the control device, use MyHOME_Suite virtual configuration
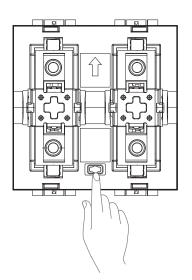
6. Use of an actuator without neutral

Correct use of the product requires the connection of the neutral wire (see connection diagram). If the neutral is not connected the LEDs flash and the device will no longer perform any commands.
When the neutral cannot be brought to the product it will be used without neutral, with reduction of the outputs (see table of loads on page 2).

When configuring with MyHOME_Suite the product can be configured to work without neutral.
With a physical configuration, the actuator connected without neutral does not work (flashing LED). Unblock it as follows:
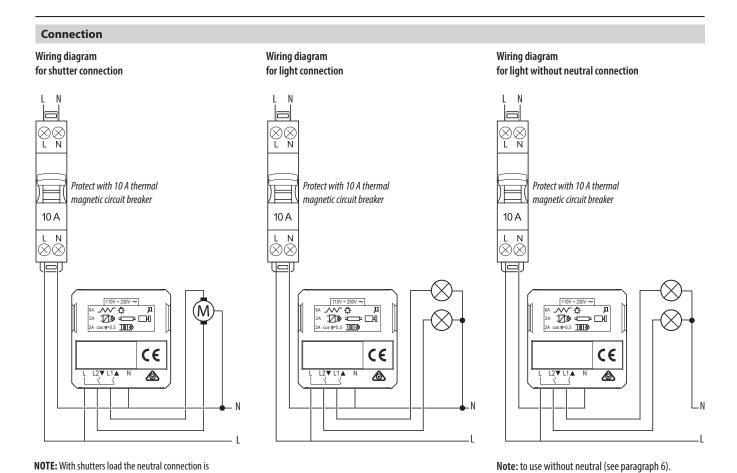

Within five minutes from switching on the product press the key indicated in the figure three times: the actuator stops flashing and unblocks.
The procedure described here is applicable to items with production date from 16W09.

Connection

Wiring diagram
for shutter connection

L N

L N

Protect with 10 A thermal magnetic circuit breaker

10 A

L N

110V ÷ 230V ~

6A
2A
2A cos φ=0,5

CE

L L2▼ L1▲ N

M

N

L

NOTE: With shutters load the neutral connection is recommended but not required

Wiring diagram
for light connection

L N

L N

Protect with 10 A thermal magnetic circuit breaker

10 A

L N

110V ÷ 230V ~

6A
2A
2A cos φ=0,5

CE

L L2▼ L1▲ N

N

L

Wiring diagram
for light without neutral connection

L N

L N

Protect with 10 A thermal magnetic circuit breaker

10 A

L N

110V ÷ 230V ~

6A
2A
2A cos φ=0,5

CE

L L2▼ L1▲ N

N

L

Note: to use without neutral (see paragraph 6).

Wiring/installation procedure

Fix the control part in the support

Cable and configure the device

Fix in the wall box